

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-14. (canceled)

15. (previously presented) The method according to claim 17, wherein the real image of the scene beginning to move relative to the target occurs upon the beginning of a zooming in function or a zooming out function of the real image.

16. (previously presented) The method according to claim 17, wherein the end of the movement of the real image of the scene relative to the target occurs upon an end of a zooming in function or a zooming out function of the real image.

17. (currently amended) A method of detecting an incident on a portion of route situated in a scene said portion of route is suitable for having objects travelling therealong, and the method using a video camera controllable in one of azimuth, elevation and field of view and having a target constituting an optoelectronic converter of a real optical image of the scene, said target being controlled by a programmable processor member, said process detecting incidents comprising:

A) having said programmable processing member determine that said video camera is substantially stationary in relation to said scene by

i) ~~selecting~~ determining in said video camera at least one point selected on a current real image of said scene, outside of said portion of said route;

ii) comparing said at least one point on said current real image which is approximately at the same position with said at least one point on at least one of a set of immediate previous targets;

iii) determining that said at least one point is approximately at the same position in said current real image as in at least one of a set of immediate previous targets;

ivii)a) if not so upon failure to determine the same position in step iii, coming back to step re-execute steps i) through iii) with at least one other point; and

ivii)b) if so upon determining the same position in step iii), proceed moving to step B)

B) having said programmable processor member process said current real images to detect incidents.

18. (previously presented) The method of claim 17, wherein the programmable processor member is deactivated as soon as the stationarity of the scene relative to the target is detected as ending, and reactivated, in order to implement the process for detecting an incident, as soon as said stationarity of the scene relative to the target is detected as beginning.

19. (previously presented) The method of claim 18, wherein said beginning and ending of said stationarity of the scene relative to the target are detected by determining at least one first image point of said real image of the scene corresponding to a stationary point of said scene, substantially outside said portion of said route, by generating a first command signal when said first image point is subjected to a change of position of said target, and by controlling said programmable processor member as a function of said first command signal.

20. (previously presented) The method of claim 19, wherein beginning and ending of said stationarity of the scene relative to the target are detected by determining at least one second and one third image points of said real image of the scene corresponding respectively to two stationary points of said scene, substantially outside said portion of said route, by generating a second command signal when distance between said second and third image points changes, and by controlling said programmable processor member as a function of said second command signal.

21. (previously presented) The method of claim 20, wherein said beginning and ending of stationarity of the scene relative to the target are detected by determining at least one fourth and on fifth image points of said real image of the scene corresponding respectively to two stationary points of said scene, substantially outside said portion of said route, by generating a third command signal when distance between said fourth and fifth image points changes, and by controlling said programmable processor member as a function of said third command signal.

22. (previously presented) The method of claim 17, wherein said target is subdivided into a plurality of photosensitive points suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces.

23. (previously presented) The method of claim 22, wherein the process for detecting an incident on said portion of route when it is suitable for having objects traveling thereon along an axis and following a path that is substantially imposed, comprises:

- in selecting a group of photosensitive points in said plurality of photosensitive points of the target, the selected group of points corresponding to points of said portion of route located on a plurality of main geometrical construction lines, said main construction lines being situated in the plane of said portion of route and all being substantially parallel to the axis of said trajectory; and

- in analyzing the set of signals delivered by the photosensitive points of said selected group.

24. (previously presented) The method of claim 23, wherein the detection process further comprises:

- in subdividing said selected group of photosensitive points into a plurality of subgroups of photosensitive points corresponding to points on the portion of route situated at the intersections between said main construction lines and respective secondary geometrical construction lines that are substantially perpendicular to the main construction line; and

- in associating each photosensitive point of a subgroup with a weighting coefficient for multiplying the value of the signal emitted by said point, the weighting coefficient being a function of the preferential probability of objects passing over the point of the portion of route whose image is the photosensitive point associated with said weighting coefficient.

25. (previously presented) The method of claim 24, wherein the photosensitive receive areas of said photosensitive points are of substantially the same dimensions.

26. (previously presented) The method of claim 25, wherein said analysis further comprises:

- averaging the values of the signals delivered by the points of each subgroup at given instants;

- comparing the averages as obtained in this way for each subgroup; and

- deducing from said comparison the presence, if any, of an incident on said portion of route

27. (previously presented) The method of claim 21, wherein said beginning and ending of stationarity of the scene relative to the target are detected by determining a plurality of image points of said real image of the scene corresponding to a plurality of points which are stationary at the beginning of movement of said real image of the scene and substantially on said portion of the route, by generating a fourth command signal when a determined number of said plurality of image points have become stationary again at the end of movement of said real image of the scene, and by controlling said programmable processor member as a function of said fourth command signal.

28. (previously presented) The method of claim 19, wherein said target is subdivided into a plurality of photosensitive points suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces.

29. (previously presented) The method of claim 20, wherein said target is subdivided into a plurality of photosensitive points suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces.

30. (previously presented) The method of claim 21, wherein said target is subdivided into a plurality of photosensitive points suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces.



31. (currently amended) An automatic road traffic incident detection system comprising at least one video camera with an optical axis controllable in azimuth, elevation and focal distance, said camera being positioned alongside said road and fit for taking real images of scenes of the road and converting them into target images which are submitted as an entry to a computer process to detect traffic incidents, said computer process being deactivated by a programmable processing member based on detection of movement of the at least one video camera by the ending of stationarity of said target images relative to said real images of scenes and ~~being is~~ reactivated based on detection of lack of movement of the at least one video camera by the beginning of stationarity of said target images relative to real images of scenes, wherein said ending and beginning of stationarity of said target images relative to said real images of scenes are detected by ~~verifying that at least one point selected on the current real image of said scene, substantially outside said portion of said route, was approximately at the same position on at least one a set of immediate previous targets~~ selecting at least one point on a current real image of said scenes, outside of said portion of said route, comparing said point on said current real image with said point on at least one of a set of immediate previous targets, determining that stationarity begins upon said point being approximately at the same position in said current real image and said set of

immediate previous targets relative to said scene and that stationarity ends upon said point not being in the same position in said current real image and said set of immediate previous targets relative to said scene.

32. (currently amended) A system for detecting an incident in the flow of traffic, comprising:

a camera with an optical axis controllable in azimuth, elevation and focal distance for taking images of roadside scenes and transmitting them for determination of a roadside incident; and

a programmable processor programmed to detect the roadside incident from images received from the camera,

wherein the programmed processor detecting the roadside incident ends processing upon determination that the camera is moving relative to a scene, the determination of camera movement based upon changing points in a current live image relative to a set of ~~stored~~previous images,

the programmed processor detecting the roadside incident begins processing upon determination that the camera is stationary relative to the scene, the determination of camera movement based upon points remaining fixed in the current live image relative to the set of previous ~~stored~~-images.